

**STATE OF MAINE**

**DEPARTMENT OF MARINE RESOURCES**

<b>IN THE MATTER OF THE APPLICATION OF JAMES W. WEST FOR A LIMITED-PURPOSE AQUACULTURE LEASE LOCATED EAST OF CALF ISLAND, SORRENTO, HANCOCK COUNTY, MAINE</b>	) ) ) ) ) )	<b>FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION</b>
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On January 11, 2000, James W. West of Sorrento, Maine, applied for a limited-purpose, (experimental) aquaculture lease totaling 2.0 acres of coastal waters of the State of Maine, located east of Calf Island in Flanders Bay, Sorrento, Hancock County, Maine. The applicant requested the lease for a term of three years for the purpose of cultivating blue mussels (*Mytilus edulis*), using suspended culture techniques.

Approval of limited-purpose aquaculture leases is governed by 12 M.R.S.A. §6072-A. This statute provides that the Commissioner of the Department of Marine Resources (DMR) may grant a limited-purpose lease if he determines that the project will not unreasonably interfere with the ingress and egress of riparian owners, navigation, fishing or other uses of the area; the ability of the site and surrounding areas to support ecologically significant flora and fauna; or the use or enjoyment within 1,000 feet of municipally, state or federally owned beaches, parks, or docking facilities. The Commissioner must also determine that the applicant has demonstrated that there is an available source of organisms to be cultured for the lease site.

A public hearing on this application was held on February 4, 2002 at 1:00 p.m. in Sorrento.

**Evidence Concerning the Nature and  
Impact of the Proposed Lease**

The applicant, Mr. James W. West, provided testimony on the application and responded to questions.

According to the application the applicant is a life long Sorrento resident and fourth generation fisherman. His fishing experience includes lobster fishing (Zone B), dragging for

mussels, scallops and quahogs plus trawling for northern shrimp. The proposed lease site was selected for its location which, in the applicant's opinion, would not cause interference with navigation or fishing activity in the area and would allow him to try cultivating mussels on ropes. The applicant testified that he would like to raise cultured mussels instead of, or to replace part of, the mussels that he now drags from the wild. In his opinion, the rope-grown mussels have a better financial return for a smaller quantity of a higher quality product compared to the wild mussels. This would also enable him to compete with the extensive Canadian cultured mussel market. The applicant testified that one mussel raft would produce 1,000 to 1,500 bushels in a 9 to 12 month period, compared to an average weekly harvest of 600 to 1,500 bushels of wild mussels using one dragger. In other words, what is landed from one boat in a week would be equivalent to the harvest from one raft in approximately one year. He explained that it would take time to convert his markets from the wild to cultivated product. Exhibits 1 & 2.

The applicant testified that shore side off-loading or landing activities of rope-grown mussels would be reduced compared to the shore side activities associated with landing wild mussels. He testified that cultivated mussel harvest would not require the transfer of bagged (wild) mussels at high tide on the shore, which must be left on the beach or landing until low tide to then be picked up and trucked away. The harvest of cultured mussels would eliminate placing shellfish in the waters at the public landing, which is an area subject to seasonal water quality closures due to bacterial pollution. Harvested cultured mussels would be transferred directly ashore in totes or similar containers from a boat or skiff to a truck, by-passing the need to use any shoreline for temporary storage between high and low tides before transference to a delivery truck. The quantity of cultured mussels harvested at any one time from a raft would be 50 – 200 bushels that would require only 15 - 20 minutes or at most one hour to land compared to 6 persons moving two boat loads or 1100 bushels of wild mussels on shore requiring a 2 hour period or more. The applicant testified that the overall quantity of mussels that he would harvest from the proposed rafts(s) would be much reduced in the long-term and would result in less landing activity at the Town facility in the long-term.

The applicant testified that he has communicated directly with, understands and would comply with the request by the Ewing family, property owners of the “Lower Beach” in Eastern Harbor, that their property not be used to off-load or land mussels. The applicant testified that it is his understanding that he may use the Ewing private property for the purpose of access to his boats moored in the harbor, such as to travel to and from the proposed lease. He stated that he has 3 fishing vessels moored in the “Lower Harbor” and one vessel moored in the Sorrento “Upper Harbor”, which is also in the vicinity of the Town’s landing facility. He testified that he would use the Upper Harbor to land mussels as allowed at this time, not the Ewing beach, and intends to build his own wharf in the future on family owned property that would reduce his commercial use of the Town facility. A letter was received from the legal counsel for the Ewing property owners on their property restrictions. Exhibit 4.

According to the application the operation would consist of up to three tandem 40' x 40' rafts. Each raft would have 450, thirty to thirty-five feet long, ½ inch dropper ropes. Seed mussels would be attached to the dropper ropes then allowed to grow to market size. The operation would start with one raft during the first year, preferably beginning in the month of May. The outermost corners would be moored using 6,000-pound granite blocks connected with 30 feet of one-inch chain and 1¼-inch nylon rope using a 3 to 1 scope for the depth of water for length of approximately 150 feet. The second and third rafts would be connected in tandem using 15 – 20 feet of 1¼-inch nylon rope between the rafts and positioned amongst the four moorings.

The applicant testified that he would experiment building 10' x 10' weighted PVC panels that would have vertically strung PVC pipes held in place by rope running through each pipe, spaced 6 to 12 inches apart, and suspended along the sides of each raft to be used for predator deference. Two tiers of panels may be necessary i.e., a second 10' x 10' panel may be suspended below the top panel. The panels would be weighted and connected at the corners to reduce swing. The applicant testified that he would prefer to try the PVC panels instead of the more commonly used 12-inch predator mesh net to deter diving ducks and curious seals. In his opinion the more rigid deterrent may work better than netting. He would use a pressure washer

from his boat to clean the panels maybe 1-2 times per summer to reduce fouling. The washer would be powered with a 10 horsepower Honda engine that he stated would be quiet compared to running it from the diesel engine on his boat.

According to the application seed mussels would be obtained from the wild by dragging (as allowed by Department regulations Chapter 12) or from Tightrope Seafarms in Blue Hill. The seeding process would be accomplished by hiring a Canadian company that would employ a socking machine or the applicant testified that he might build his own socking machine although he explained that his own design would likely not be able to sock the mussels in as evenly spaced densities as he would prefer. The applicant testified that the raft or rafts would be inspected at least 2 days per week while the seed mussels grow, whether there are 1 or 3 rafts. He stated that he has access to divers who would provide maintenance service for the lines, rafts or moorings as needed. The applicant testified that he would keep a logbook on all aspects of the operations such as seeding, harvest, maintenance and dates on the proposed lease site similar to his mandatory federal fishing permit logbooks.

The applicant testified that harvesting might occur up to 5 days per week beginning after the first 9 – 12 months of grow out and could take place year-round. However, he indicated that sales, and therefore harvesting, would be market dependent and the applicant explained that the amounts harvested from the rafts would be in small quantities such as 50 to 200 bushels on a given day compared to 500 – 800 bushels that he may land per day harvesting wild mussels. The applicant stated that there is a possibility that he wouldn't be harvesting during the summer months and this would avoid conflicts with the Upper Harbor use. However; he could not guarantee that he would not harvest during those months in order to maintain supply for his markets. He testified that he was willing to do what works best for both the Town and meeting his own needs, particularly during the summer, as he does not want to see the Upper Harbor landing closed off to commercial use. In his opinion, his use of the public facility to land the rope grown mussels would be reduced compared to his activities associated with the wild mussel landing activities and therefore the proposed lease activities would require less time at that

facility. According to the application one raft is anticipated to produce up to 60,000 pounds of mussels per year or roughly 1,000 bushels using an estimate of 60 pounds per bushel.

The application describes the bottom composition to be a soft, muddy bottom with a flat topography. The water depths range from 63 feet at mean low water (MLW) to 75 feet at mean high water (MHW). These depths allow for approximately 25 feet of clearance at MLW between the bottom of the 30 to 35-foot dropper lines and the sea floor. Local flora was described as quite limited. A drag taking 5 tows across the proposed site landed a few starfish and a few crabs. The current speed is estimated at 4.9 cm/sec flowing in a west to east direction.

The applicant testified that in his opinion there would be adequate space for vessels to navigate between the proposed lease and Calf Island due west and to Long Ledge due northeast. He testified that he has observed one tour boat from Bar Harbor that transits the area 2 to 5 times per week. It travels between Stave Island, which is located southeast of Calf Island, and circles along the shore of Calf Island from south to north to view the eagle nests located on the northern end of Calf Island. Sometimes the tour boats may travel easterly to Long Ledge before departing Flanders Bay around the north end of Calf Island. The applicant testified that other lobster fishermen occasionally fish around the general area of the proposed lease. He stated that he is the only lobster fisher in the proposed lease area. He testified that there are no scallops in the proposed lease area, however in case someone wishes to drag on the open area of the proposed lease he stated that he would not mark the lease to prohibit dragging within 300 feet.<sup>1</sup> The applicant indicated that he would mark the rafts with "high flyers" that have radar reflectors or orange poly balls, and if required by the Coast Guard would provide lighting.

A biologist, employed by the Department, testified about his observations during a site visit and information in his report. The biologist and his assistant visited the proposed lease on February 15, 2001. The biologist indicated that he has visited the general area for site visits at three separate proposed lease sites during various times of the year. The biologist testified that

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<sup>1</sup> Pursuant to 12 M.R.S.A. §6957, dragging is prohibited within 300' of the structures used for aquaculture if that area is marked in accordance with that statute.

using a survey quality differentially corrected global positioning system (dGPS), the proposed lease corner coordinates were accurately calculated and positions determined. The resulting acreage was corrected to 1.99 acres. Exhibit 3.

The biologist testified that there is at least 800 feet of navigable water with adequate water depths ranging from 39 to 49 feet at MLW for larger vessels to pass between the proposed lease boundaries to the 30-foot depth contour off Calf Island. There would also be a minimum of approximately 1475 feet of navigable water between the proposed lease and Long Ledge due north-northeast and approximately 1130 feet to a granite pier located due west southwest on Calf Island. The distance between the boundary of the proposed lease and an existing lease boundary is approximately 185 feet. The biologist explained that due to the necessary distance required for mooring placement there would be a minimum of 500 to 600 feet between the surface structures should each lease contain the maximum number of 3 rafts on each site. In his opinion there would be adequate room for passage between the existing and proposed lease sites.

The biologist testified that the proximity to the nearest bald eagle nest  $\frac{1}{4}$  mile boundary, regulated by the Department of Inland Fisheries and Wildlife, was approximately 2300 feet and therefore beyond the 1,320 foot required distance. Although the biologist did not dive this

particular site, based on his professional judgment and previous dive observations in the area he was confident that the proposed lease site has a mud bottom similar to the surrounding area.

According to the biologist's report no commercial or recreational fishing was observed during the wintertime visit and this is not considered unusual for the time of year. He testified that according to the Department's Public Health Division the proposed lease is located in an area that is classified as "open/approved" for the harvest of shellfish. The Sorrento Town Landing is located in an area that has a seasonal closure.<sup>2</sup>

A representative from the US Army Corp of Engineers (COE) testified that under their permit applicants must contact the US Coast Guard (USCG). He stated that lighting requirements to date by the USCG have been limited and only one mussel raft operation has been required to display two amber 1,320-foot candle navigation lights similar to vessels, placed on the ends of the long axis of the rafts.

A selectman from Sorrento provided testimony. He stated that personally he had no objection to this type of harvesting for environmental reasons when compared to impacts he has observed by some draggers. In his opinion there is enough space to navigate in the area if the lease were granted and it would be OK as long as the location does not interfere with existing lobster or scallop fishing. Regarding the use of the local landings, the Lower Harbor private landing is off limits. The Sorrento Upper Harbor Landing and vicinity is busy during July and August particularly when sailing lessons take place, which are organized by the local village association (VIA). The biggest concern is safety in the vicinity of the Upper Harbor Town landing for the sailor trainees when commercial vessels access the landing. He stated that the Town's ordinance(s) (Harbor use and parking) have not been changed recently. In his opinion there is a "tight situation" with users of the Town landing in the Upper Harbor during the summer however, in his opinion, any problems should be able to be worked out.

A local lobster fisherman and member of the Zone B Lobster Management Council, District 1, testified in support of the proposed lease. He stated that he has fished for the past 48

years and indicated that he knows the area well. Regarding the proposed site location, in his opinion, there is not much there to fish anyway therefore it would not interfere with fishing including lobster or scallop. He testified that there are not as many tour boats as there used to be in the area. The only time the tour boats come into Flanders Bay in recent years is on bad weather days when they cannot get out to Egg Rock, around Mount Desert Island or once in a while they tour the area in the evening. In his opinion there is adequate room for the tour boats to navigate around the mussel rafts.

The fisherman testified that he is the new caretaker of the Ewing property or "Lower Harbor beach". He indicated that the statements by the applicant were correct regarding the use of that property and that in the near future the use of the Ewing property will require a parking permit and to obtain a parking permit a person must have a mooring registered with the Town with their fees paid in full. Parking would therefore be allowed only for mooring permit-holders for the purpose of access to permitted mooring(s). The applicant could therefore access his mooring from that location to tend the proposed lease, for example. Off-loading or the landing of mussels is not and will not be allowed at this private property. In his opinion, the proposed lease activities would not result in a big impact on the local harbors or public landing facilities.

### **Findings of Fact**

According to the Department's biologist report, the proposed lease is located over 1,100 feet from the nearest shore at high water mark and a granite pier on Calf Island. Access or use of Calf Island was not requested or required by the applicant. The applicant testified that access for the proposed lease would be from a municipal or private landing in Sorrento. Based on the evidence that the applicant does not request or require riparian access, that there is available public access and based on the Department's biologist report there is at least 1,100 feet to access the shore between the proposed lease and the nearest shore at high water, I find that the lease will not unreasonably interfere with the ingress and egress of the riparian owners.

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<sup>2</sup> DMR Regulations Chapter 95.04 BB, Closed Area No. 50, Sorrento, effective January 11, 1999.

The proposed lease is located in water depths that range from 63 feet of water at MLW to 75 feet at MHW in the southwest portion of Flanders Bay. The proposed lease is located over 1,100 feet from the nearest shore on the eastern side of Calf Island. Credible testimony by a local lobster fisherman, who is a member of the Zone B Lobster Management Council, indicated that the proposed lease would not interfere with the limited amount of local tour boats in the area. The Department's biologist testified that there is at least 800 feet of navigable water with water depths ranging from 39 to 49 feet at MLW that would be adequate for larger vessels to navigate between the proposed lease boundary and the 30-foot depth contour off Calf Island. According to the biologist's testimony the nearest existing aquaculture lease is a similar size mussel raft type lease located approximately 185 feet due west northwest and there would be a minimum of 500 to 600 feet of space between the location of the surface structures (rafts) therefore leaving adequate room in which to navigate between the rafts. Based on the testimony and evidence, I find that the lease will not unreasonably interfere with navigation in the area.

Testimony by the applicant and a credible local lobster fisherman indicated that the primary fishery in the general area is lobster and that the proposed lease area is not located in a spot heavily fished for lobsters, particularly compared to the north and west areas of Flanders Bay between Calf Island and the Lower Harbor. They also indicated that the proposed lease is not located in an area that is dragged for scallops. The area of the proposed lease is located in waters classified as open for the harvest of shellfish according to the biologist's report. Based on the testimony and evidence, I find that the lease will not unreasonably interfere with fishing, aquaculture leases, or other uses of the area.

Blue mussels would come from indigenous sources within Maine. The proposed activities involve only the rearing of blue mussels on drop lines suspended from rafts. Bottom planting of mussels is not requested. The Department's biologist testified that the proposed lease would be located 2300 feet from the nearest IF&W designated essential habitat for an eagle nest on Calf Island, which positions the proposed lease beyond the ¼ mile habitat boundary for the nest. No information in the record indicated that the proposed activities would

cause interference with local flora or fauna. Based on this evidence, I find that the proposed activities will not unreasonably interfere with the ability of the site and surrounding areas to support existing ecologically significant flora and fauna.

Seed mussels would be obtained from Maine waters by drag, as allowed by Department regulations or from a nursery source such as Tighrope Seafarms in Blue Hill. Based on this evidence, I find that there is an available source of blue mussels.

The applicant testified that he would access the proposed lease from either the public landing in Sorrento or as permitted from the private Ewing property as described in the record by the new caretaker. The applicant testified that he would not use the Ewing property to off-load mussels as prohibited by the landowner and described in Exhibit 4. The applicant testified that the rope-grown mussels would be moved ashore in containers at the Sorrento public landing directly from his boat or a skiff to a truck without the use of the intertidal shore for temporary storage of bagged mussels, which is the common landing practice for wild harvested mussels, and that the quantities would be much reduced than is also common with the harvest of wild mussels. The applicant testified to his willingness to work with the Town regarding the safety and congestion concerns at the Town landing particularly during the summer months, as it is in his best interest to insure that the facility remains open for future commercial use as described in the record. Credible testimony by a Sorrento Selectman and a local lobster fisherman indicated that the proposed lease activities as described in the hearing record would not have an additional or great impact on the Sorrento Upper Landing facility. Based on the above, I find that the aquaculture lease activities proposed for this site will not unreasonably interfere with public use or enjoyment within 1,000 feet of municipally, state or federally owned beaches, parks, or docking facilities.

### **Conclusions of Law**

Based on the above findings, I conclude that:

1. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner;

2. The aquaculture activities proposed for this site will not unreasonably interfere with navigation;
3. The aquaculture lease activities proposed for this site will not unreasonably interfere with fishing or other uses of the area, taking into consideration the number and density of aquaculture leases in the area;
4. The aquaculture lease activities proposed for this site will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna;
5. The applicant has demonstrated that there is an available source of blue mussels; and
6. The aquaculture lease activities proposed for this site will not unreasonably interfere with public use or enjoyment within 1,000 feet of municipally, state or federally owned beaches, parks, or docking facilities.

The evidence in the record supports a finding that the proposed aquaculture activities meet the requirements for the granting of an aquaculture lease set forth in 12 M.R.S.A.

§6072-A.

### **Decision**

Based on the foregoing, the Commissioner grants the requested limited-purpose commercial lease of 1.99 acres to the applicant for a period of three (3) years from the date of this decision, for the purposes of cultivating blue mussels using up to three tandem 40' x 40' rafts for suspended culture techniques. The applicant shall pay the State of Maine rent in the amount of \$50 per acre per year. The applicant shall post a bond or establish an escrow account in the amount of \$5,000, conditioned upon its performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations. A limited-purpose lease for commercial aquaculture research and development conveys only those rights specified in the lease.

### **Conditions to be Imposed on Lease**

The Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities. Conditions are designed to encourage the greatest multiple, compatible uses of the lease area, while preserving the exclusive rights of the lessee to the extent necessary to carry out the purposes of the aquaculture law.

The following conditions are placed on this lease:

1. lobster fishing, other commercial fishing and recreational fishing is allowed on the open areas of the lease; and
2. the lease area shall be marked in accordance with U.S. Coast Guard and Department of Marine Resources regulations Chapter 2.80.

The Commissioner may commence revocation procedures if he determines that substantial aquaculture has not been conducted within the preceding year or that the lease activities are substantially injurious to marine organisms. If any of the conditions or requirements imposed in this decision, in the lease, or in the law are not being observed, the Commissioner may revoke the aquaculture lease.

Dated: \_\_\_\_\_

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**George D. Lapointe (Commissioner)**  
**Department of Marine Resources**